



# SLAN<sup>®</sup> -96P Real-time PCR system



*Grow your Realtime PCR potential!*

✓ **Unique design**

✓ **Innovative technology**

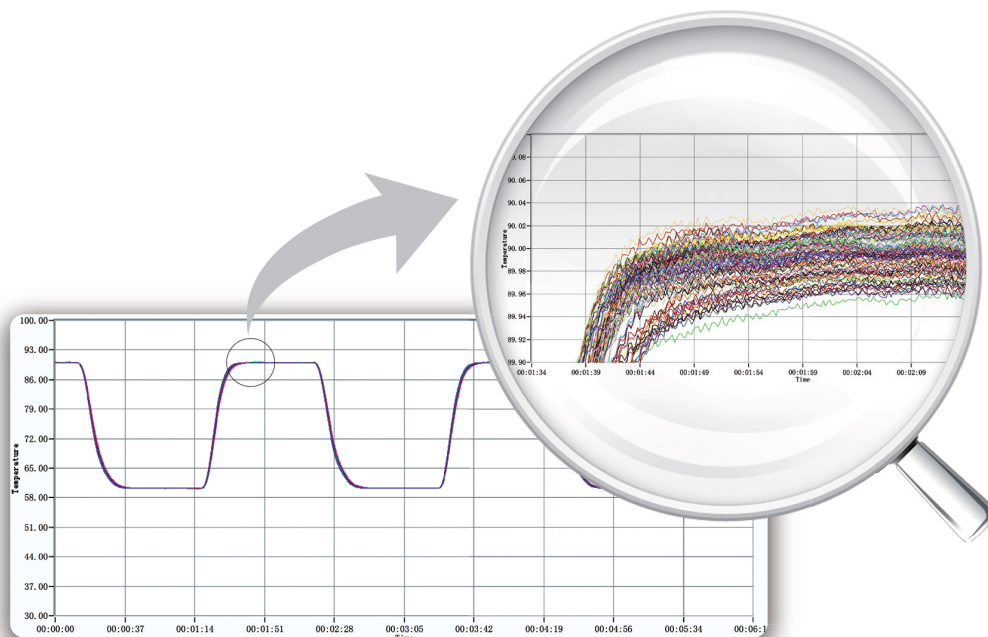
## the latest SLAN-96P real-time PCR system brings you...

### ■ **Innovative dual 48/48 reaction blocks - increased efficiency and flexibility**

SLAN-96P's dual 48/48 reaction blocks are controlled separately, like two independent instruments. With SLAN-96P, two different assays can be tested simultaneously on a single instrument; A new assay can be started while another is running.

### ■ **Patented precise-temperature-control technology: well-to-well uniformity with an accuracy of $\pm 0.1^{\circ}\text{C}$**

Benefit from its patented advanced spot-to-spot temperature compensation technology, the SLAN-96P's temperature uniformity across 96 wells is within a remarkable  $\pm 0.1^{\circ}\text{C}$ . This superior uniformity meets all your needs for highly precise studies, especially for High-Resolution Melting Curve (HRM) applications.



Partial enlarged plot of SLAN-96P's temperature curve shows temperature uniformity cross 96 wells within  $\pm 0.05^{\circ}\text{C}$

### ■ **Advanced optical system - reliable, sensitive and calibration-free**

- The unique Lateral-Capture signal technology enhances fluorescence capture efficiency and eliminates signal noise, offering better detection sensitivity and smooth amplification curves;
- The improved optical system decreases instrument background and ensures better reproducibility;
- Long-lasting high-intensity LEDs which are reliable and maintenance-free;
- Negligible optical background results in no background calibration;
- Innovative optical light-path design eliminates edge effect and gives uniform fluorescence intensity for each tube. No ROX reference calibration required;
- Instrument hardware calculates gain automatically during running. No gain setting required.

### ■ **Much faster - generates accurate results in less than 50 minutes**

Based upon the original SLAN system, the latest SLAN-96P has improved upon its thermal design with a super-fast heating/cooling rate of up to  $4.0^{\circ}\text{C}/\text{sec}$ . The subsequent rapid thermal cycling results in much faster assays.

### ■ **Professional multiplex detection channels - true 6plex real-time PCR**

SLAN-96P's 6 sets of excitation and emission filter combinations ensure 6-color multiplexing real-time reading capacity; You will enjoy a high flexibility in the choice of fluorescence dyes and detection format.

### ■ **Ideal approach to your HRM study - accurate, sensitive, no need for complicated temperature shift calibration**

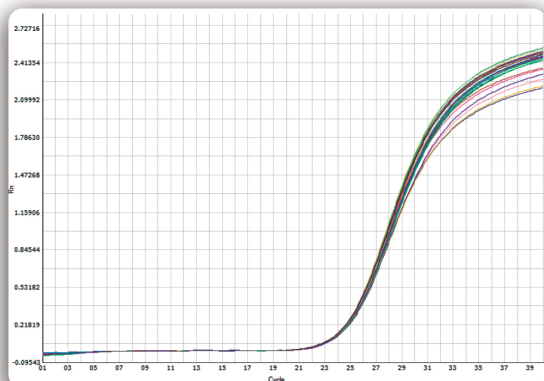
SLAN-96P's unsurpassed thermal performance and superior optical system makes it an ideal platform for HRM:

- Fast fluorescence detection mode completes gene scanning in 30mins;
- Advanced hardware design and software algorithms generate accurate and precise data without the need for temperature shift calibration.

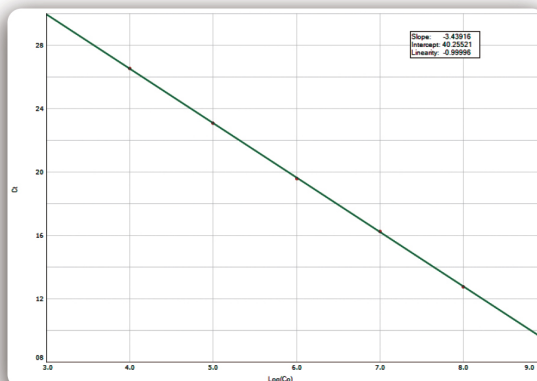
### ■ Outstanding performance - reduces experimental error

The new SLAN-96P brings high-quality and reliable data:

- Correlation coefficient:  $-0.999 \sim -1.000$
- Sensitivity: detection of one starting template copy
- High resolution: easily discriminates between 1000 and 2000 copies
- Reproducibility: CV < 1.0%
- Broad dynamic range:  $10^0 \sim 10^{10}$  copies/mL



Reproducibility across 96 wells: CV<1.0%

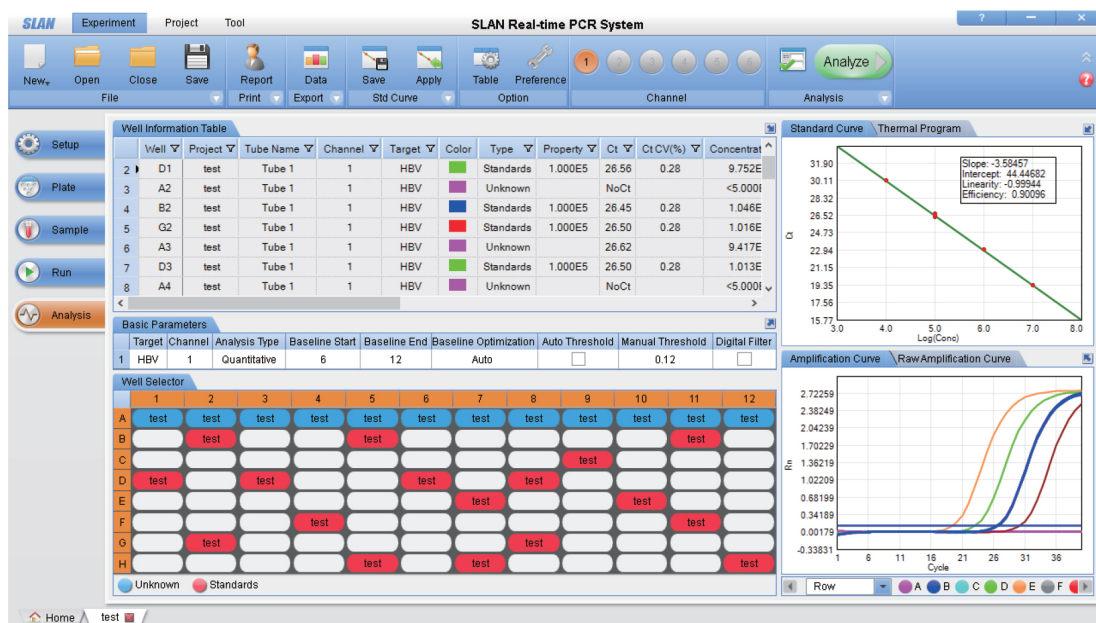


Correlation coefficient: -0.99996

### ■ Powerful yet easy to use multitasking software - excellent tools for high-quality data analysis

SLAN-96P's powerful, versatile multi-tasking software provides:

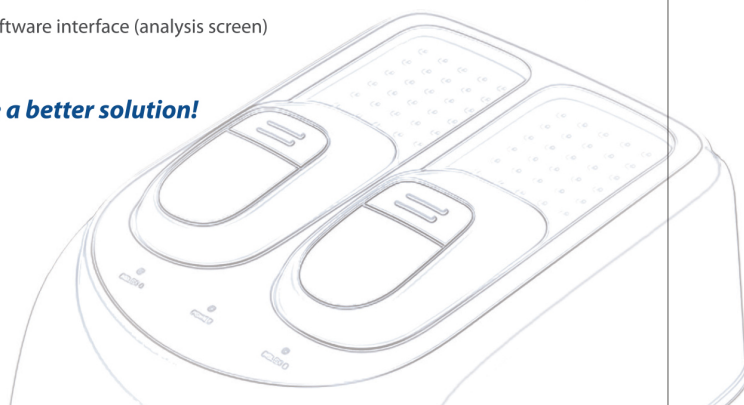
- A broad range of analysis applications: Quantification/Qualification, Allelic Discrimination, Multi-plex Melting Curve analysis, Relative Quantification, HRM;
- The one-of-a-kind *Project* design simplifies experiment workflow; users are free of probes setup and PCR protocol editing;
- User-friendly and intuitive multi-task software interface offers convenient approach to get started and obtain reliable results;
- Flexible import and export functions enable easy LIMS connectivity;
- Supports complex algorithms, enabling anything from basic to sophisticated data analysis;
- Manager multi-instruments (SLAN-96P/96S/48P) simultaneously by USB connection to increase throughput;
- Improved patient report editor.



SLAN-96P multi-tasking software interface (analysis screen)

### ■ Support and service - we are committed to provide a better solution!

- 18 month warranty;
- Rapid customer and instrument support service;
- Highly stable and durable; High performance at an affordable price;
- Low noise, low power consumption, robust, compact and elegant;
- Open platform: supports all universal PCR reagents and plastics.





## Specifications

|                          |   |
|--------------------------|---|
| Product model            | SLAN-96P  |
| Sample capacity          | 96 wells (dual 48/48 reaction module)   |
| Sample size              | 15 - 50µL   |
| Consumable               | 0.2mL PCR tubes, 8-tube strips, 48-well plates  |
| Parallel running mode    | dual reaction blocks /running 2 tests independently   |
| Temperature range        | 4-99°C  |
| Max ramp rate            | 4.0°C /sec  |
| Temperature accuracy     | ±0.1°C  |
| Temperature uniformity   | ±0.1°C  |
| Thermal cycling system   | Peltier-based system  |
| Temperature control mode | tube control/block control  |
| Light Source             | LED (maintenance-free)  |
| Detector                 | high sensitivity photoelectric sensor   |
| Sensitivity              | 1 copy  |
| Reproducibility          | CV<1.0%   |
| Correlation coefficient  | -0.999 ~ -1.000   |
| Linearity range          | 10 <sup>0</sup> ~ 10 <sup>10</sup>  |
| Resolution               | can discriminate between 1000 copies and 2000 copies  |
| Excitation               | CH1 470 nm    CH2 530nm    CH3 580nm<br>CH4 630nm    CH5/CH6 custom-made  |
| Emission                 | CH1 510 nm    CH2 565nm    CH3 620nm<br>CH4 665nm    CH5/CH6 custom-made  |
| Dyes and probes          | CH1 FAM™/SYBR Green®    CH2 VIC®/HEX/JOE™/TET<br>CH3 ROX/Texas Red®    CH4 CY5™   |
| Software application     | Absolute Quantification、Positive/Negative、Allelic Discrimination (TaqMan® endpoint method)、Melting Curve analysis (FRET)、Relative Quantification (RQ)/Gene expression analysis、High Resolution Melting Curve analysis |
| Hot-lid                  | 30°C ~108°C (default 105°C, adjustable) electronic automatic hot-lid  |
| Power supply             | 230VAC, 50Hz  |
| Power consumption        | 850VA   |
| Computer requirement     | 2GB RAM, CPU 1.5GHz   |
| Dimensions               | 380mm×520mm×250mm ( W×D×H )   |
| Weight                   | 18Kg  |
| Operation system         | Microsoft® Windows XP/Vista/7/8   |
| Communication            | RS232, USB  |